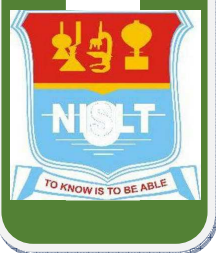




The Nigerian Institute of Science Laboratory Technology (NISLT)  
Federal Ministry of Science and Technology

**2018  
SHORT TERM  
TRAINING  
PROGRAMMES**



*(A statutory Professional Body of Laboratory Technologists/Scientists Chartered by Act No. 12 of 2003 of the National Assembly)*

**National HQTRS:** Samonda-Sango/U.I. Road, P. O. Box 9764, U. I. Post Office Ibadan, Oyo State, Nigeria

**Tel:** 07087978055, 08062117814, 08030787747,

**E-mail:** [inform@nisl.gov.ng](mailto:inform@nisl.gov.ng), [enquiry@nisl.gov.ng](mailto:enquiry@nisl.gov.ng), **website:** [www.nisl.gov.ng](http://www.nisl.gov.ng)



## NISLT 2018 SHORT TERM TRAINING PROGRAMMES



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## **BRIEF ON THE INSTITUTE**

The Nigerian Institute of Science Laboratory Technology (NISLT) was established by Act 12 of 2003 of the National Assembly and made a parastatal of the Federal Ministry of Science and Technology. The Institute was hitherto known as the Nigerian Institute of Science Technology (NIST) founded in 1971 saddled with responsibility of “advancing science laboratory technology profession and ensure through its registered members effective and efficient management and administration of science laboratories in Nigeria”.

Over the years, the Institute has put in place human resources and infrastructure to enable it fulfil its mandate through the establishment of Multipurpose Science Laboratory at its national Secretariat, Ibadan, Oyo State, equipped with modern and computerized science equipment for the conduct of training, routine laboratory services and research using new technologies.

Participants for the training workshops will have the opportunity to use these equipment and thus acquire relevant knowledge and skills in their applications to enhance their performances at work.

Resource persons for the workshops are experienced scientists and technologists drawn from Universities, Research Institutes and the Private Sector.

## **TRAINING METHODOLOGY**

The workshops will be conducted through combination of lectures, discussions, case studies, simulation exercises, multimedia presentations and practical exercises.

In view of the above we are pleased to announce the under listed workshops and training programmes scheduled for the year 2018.



**1. BASIC LABORATORY TECHNIQUES, INSTRUMENTATION, METHODS AND SAFETY FOR LABORATORY ASSISTANTS AND ATTENDANTS.**

**FOR:** Assistant Technologists, Laboratory Assistants/Attendants, Assistant Technicians and other Junior/Middle level laboratory Personnel in Tertiary Institutions, Secondary Schools, Research Institutes, Industries and Private Organizations.

**OBJECTIVE:** The main objective of this workshop is to expose Junior and Middle level laboratory Personnel to the latest practices and measures required in a modern teaching, research or analytical laboratory/instrument workshop.

**COURSE CONTENT:**

- Good Laboratory Practice (GLP)
- Basic laboratory ethics
- Use of basic laboratory equipment, tools and reagents
- Use and maintenance of laboratory glass wares
- Principle of laboratory hygiene
- Cleaning of some basic laboratory equipment and glass wares
- Method and Procedures for presentation of laboratory results and reports
- Safety in laboratories and workshops
- Basic laboratory infrastructure and instrument maintenance techniques
- Application of basic techniques and instrumentation in physical, chemical and biological laboratories

**DURATION:** 7days  
**DATE:** 25<sup>th</sup> March – 31<sup>st</sup> March, 2018  
**ARRIVAL:** 25<sup>th</sup> March, 2018  
**DEPARTURE:** 31<sup>st</sup> March, 2018  
**FEE:** ₦70,000.00

**VENUE:** Ibadan Office of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are required to come with their laboratory coats



## 2. QUALITATIVE RESEARCH METHODS AND SCIENTIFIC RESEARCH PAPER WRITING WORKSHOP.

**FOR:** Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVES:** The objectives of this workshop are to broaden the participants' understanding and appreciation of qualitative research approach as well as exposing the participants to methods and tools of conducting qualitative research through the design, data collection, data management, analysis and report stages of the research process.

### COURSE CONTENT:

- Theoretical approaches to scientific research
- Methods of writing research proposals
- Study, designs and qualitative tools for scientific research
- Methods of data collection and management
- Methods of reporting scientific research and methods of publications
- Analysis of research data using basic computer applications, use of ICT tools for research development
- Ethics of research
- Use of library resources

DURATION: 7days

DATE: 8<sup>th</sup> -14<sup>th</sup> April, 2018

ARRIVAL: 8<sup>th</sup> April , 2018

DEPARTURE: 14<sup>th</sup> April 2018

FEE: ₦70,000.00

VENUE: **VENUE:** Headquarters of the Nigerian Institute of Science Laboratory Technology, Jabi Airport Road, beside NOUN, adjacent federal Medical Centre, Abuja, Nigeria.

, **REQUIREMENT:** Participants are required to come with their laptops

**NOTE:** Participation in the training workshop on scientific research methods, qualitative research, data management and reporting is a **pre-requisite for the award of FELLOW** of the Nigerian Institute of Science Laboratory Technology. Subsequently, all applications for upgrading to Fellow of the Institute should be accompanied with a certificate of attendance of the Training workshop on scientific research methods, qualitative research and data management.



**NISLT IN CONJUNCTION WITH INSTITUTE OF CHURCH AND SOCIETY ANNOUNCES**

**3. TRAINING WORKSHOP ON PROMOTION OF SAFE FARMING AND POST HARVEST ACTIVITIES (PROCESSING, FOOD STORAGE AND CONSUMPTION)**

**FOR:** AGRICULTURAL TECHNOLOGISTS, FOOD TECHNOLOGISTS, RESEARCHERS, MARKET PEOPLE, STORAGE FARMERS, POST HARVESTS YOUTHS, RELIGIOUS LEADERS, AND OTHER GOVERNMENT OFFICIALS.

**OBJECTIVES:** The objectives of this workshop are to

- Support small scale farmers in Nigeria for local food production (subsistence farming)
- To sensitize people on how to grow safe food.
- To sensitize people on safe processing methods of food items.
- To sensitize people on safe food storage methods of food items.
- To sensitize people on safe food consumption.

**COURSE CONTENT:**

- Health, environmental and economic effects of reducing herbicides and pesticides use in agriculture
- Food products contamination in farm production
- Various foods contamination and its effects.
- Pesticides allowed in food
- Pesticides banned in food samples
- New trends in food preservation
- Best practices in food safety control and management
- Different storage methods of food items for safe consumption
- Processing of food items for the enhancement of safe consumption

**DURATION: 5 DAYS**

**DATE: 22nd-26<sup>th</sup> APRIL, 2018**

**ARRIVAL: 22nd April, 2018**

**DEPARTURE: 26<sup>th</sup> April, 2018**

**FEE: ₦50, 000**

**VENUE: Headquarters of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan**



#### 4. WORKSHOP ON QUALITATIVE AND QUANTITATIVE ANALYSIS OF PHYTOCHEMICALS/ANTINUTRIENTS AND ANTIOXIDANT ACTIVITY.

**FOR:** Plant Scientists, Herbal medicine practitioners, Technologists/Scientists, Research Officers, lecturers, agriculturists, farmers, government agencies, agricultural officers, research institutes, industries and private establishment.

**OBJECTIVES:** The main objective of the workshop is to acquaint participants with the latest analytical techniques and procedures for phytochemical and antioxidant activity analysis.

#### COURSE CONTENT:

- General introduction to and principles of Phytochemicals and antioxidants
- Developing methods for phytochemical analysis
- Sample, reagents and standard preparations for phytochemical and antioxidant analysis
- Equipment calibration and plotting of standard calibration curve
- Phytochemical Screening and its implication (practicals)
- Phytate, oxalate and flavonoids analysis
- Tannin, Saponin and Alkaloids analysis
- Cyanide and Phenol analysis
- DPPH and H<sub>2</sub>O<sub>2</sub> scavenging activity
- Sources of error in phytochemical analysis
- Quality assurance, data analysis and interpretation of test results
- HPLC determination of phytochemicals

**DURATION: 7 DAYS**

**DATE: 29<sup>th</sup> APRIL -5<sup>th</sup> MAY, 2018**

**ARRIVAL: 29<sup>th</sup> April, 2018**

**DEPARTURE: 5<sup>th</sup> May, 2018**

**FEE: ₦70, 000**

**VENUE:** Headquarters of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan.

**REQUIREMENT:** Participants are required to come with their labcoats/laptops



**5. WORKSHOP ON EFFECTIVE LABORATORY QUALITY MANAGEMENT, ADMINISTRATION AND GOOD LABORATORY PRACTICE**

**FOR:** Laboratory Scientists/ Technologists, Laboratory Managers/Supervisors, Users of laboratory Equipment and Laboratory Equipment Procurement Officers. Chief Executives of science based Institutions are also invited.

**OBJECTIVE-** The main objective of this workshop is to acquaint participants with the principles of laboratory policies and management administration, good laboratory practices, equipment management, procurement procedures and safety management procedures in the laboratory

***COURSE CONTENT***

- Good Laboratory Policies, Management and administration
- Introduction, Objectives and key Requirements of Laboratory Management
- Application of Laboratory Management to Good Laboratory Practice
- Strengthening Laboratory Management Towards Accreditation
- Laboratory Accreditation, Audits and Technical Requirements
- Quality Assurance of Test Results
- Good Laboratory Management (GLM) and Good laboratory Practices (GLP)
- Modern Laboratory Design/Management and Maintenance
- Preparation, Review and standardization of standard operating procedures
- Scientific Research Methods
- Applications of Laboratory Information Management System
- Effective laboratory safety management
- Equipment qualification and management
- Application of ISO 17025 in laboratory management

***DURATION:*** 7 days

***DATE:*** 13<sup>th</sup> – 19<sup>th</sup> May, 2018

***ARRIVAL:*** 13<sup>TH</sup> May, 2018

***DEPARTURE:*** 19<sup>TH</sup> May, 2018

***FEE:*** ₦70, 000.00

**VENUE:** Headquarters of the Nigerian Institute of Science Laboratory Technology, Jabi Airport Road, beside NOUN, adjacent federal Medical Centre, Abuja, Nigeria.

**REQUIREMENT:** Participants are advised to come with their Laptops.





## NISLT 2018 SHORT TERM TRAINING PROGRAMMES



### NISLT IN CONJUNCTION WITH PHYSIOLOGY DEPARTMENT, UNIVERSITY OF IBADAN ANNOUNCES

#### **6. TRAINING ON CARDIAC MUSCLE, CYCLE, ELECTROPHYSIOLOGY AND BLOOD PRESSURE**

**FOR:** Laboratory Scientists, Laboratory Technologists, Quality Control Managers, Research officers, Scientific officers, Clinicians, Students in Tertiary Institutions and Research Institutions.

**OBJECTIVE:-**Participants shall be able to determine the basic properties of cardiac and skeletal muscle and systemic circulation using toad as the animal model. In addition, participants shall be able to use non-invasive techniques and equipment to determine the cardiac electrophysiology and blood pressure using the Wistar rats. Conclusively, participants shall be able to interpret clinical and research data.

#### **COURSE CONTENT**

- Cardiac cycle and the effects on drugs on the chronotropic and inotropic activities of the heart
- Demonstration of unique properties of the heart including latent period, refractory period and all or none law, using the toad's heart.
- Functional classification of blood vessel and blood circulation with specific demonstration using mesenteric circulation.
- Simple muscle twitch and properties of skeletal muscle
- Electrocardiography and its significance in research and diagnosis
- Methods of ECG determination
- Determination and interpretation of ECG using EDAN 50 ECG machine for animal models
- Blood pressure determination using tail cuff technique in rats.

***DURATION: 7 DAYS***

***DATE: 20<sup>TH</sup> - 26<sup>TH</sup> MAY, 2018***

***ARRIVAL: 20<sup>TH</sup> MAY, 2018***

***DEPARTURE: 26<sup>TH</sup> MAY, 2018***

***FEE: ₦70, 000***

**VENUE:** Headquarters of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan.

**REQUIREMENT:** Participants are required to come with their laptops



## 7. SPECIALIZED TRAINING WORKSHOP ON SCIENCE EQUIPMENT, MAINTENANCE, REPAIR AND MANAGEMENT OF EQUIPMENT USED IN CHEMICAL LABORATORY

**FOR:** Laboratory Technologists/Scientists, Instrumentation Technologists, Equipment Engineers, Technicians, Laboratory Equipment Suppliers and Technologists in the field of Physics/Electronics, Engineering Production and other users of laboratory equipment.

**OBJECTIVES:** The training work shop is designed to expose participants to the techniques of maintenance and repair of laboratory equipment involving the use of sophisticated fault detection and diagnostic methods. This is a hand-on practical training for instrument technologists who are mostly in the chemical laboratory. Participants will be exposed to maintenance skills required to keep the equipment functional. The participants shall be exposed to preventive maintenance troubleshooting, repairs, selection and procurement of appropriate spare parts, professional and technical skills of handling equipment and safety techniques in equipment maintenance.

### COURSE CONTENT:

- Basic electronics and electricity
- Introduction to the use of MATLAB software
- Equipment Qualification
- Basic Soldering Techniques
- Electronic design and programming
- Instrumentation of selected laboratory equipment
- Maintenance, Repairs and management of
  - I. Atomic Absorption Spectrophotometer
  - II. UV-VIS Spectrophotometer
  - III. High Performance Liquid Chromatograph (HPLC)
  - IV. Oven
  - V. Furnace
  - VI. Bomb Calorimeter
  - VII. Hot plate
  - VIII. Refrigerator and air conditioner etc

Basic use of ICT tools in interface with laboratory equipment

**DURATION:** 7 days

**DATE:** 3<sup>rd</sup> June – 9<sup>th</sup> June, 2018

**ARRIVAL:** 3<sup>rd</sup> June, 2018

**DEPARTURE:** 9<sup>th</sup> June, 2018

**FEE:** N80,000

**VENUE:** Ibadan Office of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENTS:** Working tools and laboratory coats/work overall

**NOTE:** Tools kits will be provided free during the training.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.



8. **TOPIC: TRAINING ON LABORATORY DOCUMENTATION, DATA MANAGEMENT AND REPORTING**

**FOR:** Quality Managers, Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVES:** The objectives of this workshop are to broaden the participants' understanding of laboratory documentation, appreciation of data management, data transformation and exposing them to various and current statistical methods and tools for Interpretation & representation of data using Matlab, SPSS, R-system and Epi info Analytical packages. It will also expose the participants to various requirements for designing Laboratory Information Management System.

**COURSE CONTENT**

The course will cover the following topics:

- Introduction to laboratory documentation
- Introduction to data management
- General laboratory documentation guidelines
- specific documentation requirements and its benefits
- Overview of Matlab , SPSS, Epi info and R- system
- Data input
- Output to Matlab, Epi info , R system, SPSS and to Ms-Word
- Data Manipulation
- Sorting and selecting of cases
- Data transformation and sampling
- Scatter plots and other graphs
- Frequency tables
- Cross tabs & Contingency tables
- Simple linear Regression Analysis
- Covariance Analysis
- Interpretation & representation of Matlab, SPSS, R system and Epi info Analysis
- Testing of hypothesis
- Measures of dispersion and central tendency
- Biosecurity of laboratory data

**DURATION:** 7days  
**DATE:** 17<sup>th</sup> – 23<sup>rd</sup> June, 2018  
**ARRIVAL:** 17<sup>th</sup> June, 2018  
**DEPARTURE:** 23<sup>rd</sup> June, 2018  
**FEE:** ₦80, 000.00

**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

Requirement: Participants are advised to come with their Laptops.



## 9. ADVANCED TRAINING COURSE ON MOLECULAR TECHNIQUES/BIOTECHNOLOGY

**FOR:** Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVE:** The purpose of this workshop is to provide further practical knowledge in the area of molecular/biotechnology techniques. This course is meant for those that are working in the specified area and needs further training and exposure. Newcomers to the field are also encourage to come

### COURSE CONTENT

- Principle of molecular biology techniques
- DNA Molecular Techniques
- Southern Blotting
- RNA/DNA Technologies, isolation and characterization
- Northern Blotting
- Application of Molecular Biotechnology
- Restriction digestion
- Detection of antibodies resistance gene in bacteria
- Polymerase Chain reaction (PCR)
- DNA sequencing
- Primer design
- DNA library construction
- Bio-informatics etc..

**DURATION:** 7days  
**DATE:** 8<sup>th</sup> – 14<sup>th</sup> July, 2018  
**ARRIVAL:** 8<sup>th</sup> July, 2018  
**DEPARTURE:** 14<sup>th</sup> July, 2018  
**FEE** N80, 000.00

**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.



**10. PRACTICAL TRAINING ON FIBER AND FIBER FRACTIONS ANALYSIS TO INCLUDE CRUDE FIBER, ACID DETERGENT FIBER (ADF), NEUTRAL DETERGENT FIBER (NDF), ACID DETERGENT LIGNIN (ADL), CELLULOSE AND HEMICELLULOSE**

**FOR :** Animal scientists, Feed producers, Laboratory Technologists, Laboratory Scientists, Research Scientist, Quality Control and Assurance Managers in Industries, public analysts, Development and Production Managers, Human Resource Managers etc

**OBJECTIVE:** To expose the participants to

- The use of inexpensive and simple laboratory equipment and glassware for fiber and fiber fractions analysis
- Alternative methods for fiber and fiber fractions analysis without using expensive Fiber machines
- To equip the participants with the skills and stepwise methods for fiber and fiber fractions analysis and finally to introduce participants to total dietary fiber analysis

**COURSE CONTENT:**

- Introduction to fiber and fiber fractions analysis
- High tech fiber equipment versus classical methods: advantages and disadvantages
- Sample and reagent preparations
- Analytical method for determination of crude fiber
- Analytical method for determination of Acid Detergent Fiber
- Analytical method for determination of Neutral Detergent Fiber
- Cellulose and Hemi-cellulose determinations
- Dietary Fiber analysis
- Data analysis and interpretation
- Quality control chart for fiber analysis.

**DURATION:** 7days  
**DATE:** 22<sup>nd</sup> – 27<sup>th</sup> July, 2018  
**ARRIVAL:** 22<sup>nd</sup> July, 2018  
**DEPARTURE:** 27<sup>th</sup> July, 2018  
**FEE:** ₦70, 000.00

**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.



## 11. PRACTICAL USE OF ATOMIC ABSORPTION SPECTROPHOTOMETER (AAS) FLAME PHOTOMETER AND ULTRA-VIOLET/VISIBLE SPECTROPHOTOMETER FOR ANALYSIS

**FOR:** Laboratory Scientists, Technologists, Chemical Analysts, Quality Control Managers in Tertiary Institutions, Research Institutes, and the industrial sector.

### OBJECTIVE:-

This workshop is designed to expose and impart practical knowledge to participants on recent state of analytical techniques in AAS, FLAME & UV Visible Spectrophotometer, learn the practical operational use of the equipment, care, trouble shooting and maintenance.

### COURSE CONTENT

- Basic and advanced concept of Atomic Absorption Spectrophotometer, and UV-Visible Spectrophotometer
- Biological and chemical application of UV
- Components of AAS, Flame photometer and UV-Visible Spectrophotometer
- Principles and operation of AAS, flame photometer and UV/Visible spectrophotometer.
- Validation and Data Interpretation
- Calibration of AAS, flame photometer and UV/Visible spectrophotometer
- Applications of Atomic Absorption Spectrophotometer, flame photometer and UV/Visible spectrophotometer.
- The use of AAS, flame photometer and UV-Vis Spectrometer for metal oxides analysis e.g  $Fe_2O_3$ ,  $MgO$ ,  $P_2O_5$  etc
- Trouble shooting and maintenance of AAS, flame and UV/Visible Spectrophotometer.
- Installation methods for AAS etc.
- Operational techniques for AAS, etc.

**DURATION:** 7days  
**DATE:** 5<sup>th</sup> – 11<sup>th</sup> August, 2018  
**ARRIVAL:** 5<sup>th</sup> August, 2018  
**DEPARTURE:** 11<sup>th</sup> August, 2018  
**FEE:** ~~₦~~80,000.00

**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats and laptops.



## 12. ISO-17025 AND LABORATORY -RISK ENGAGEMENT PROGRAMMES

**FOR:** Laboratory Managers, Quality Assurance Officers, Laboratory Scientists and Technologists, Laboratory Assessors in food, environmental, electronic, chemical, pharmaceutical, institutional and industrial laboratories.

**OBJECTIVES:** The training workshop is designed to train Laboratory Personnel and Laboratory Assessors on how to install, maintain and improve laboratory quality systems that meet the requirements of ISO/IEC17025 and other standards. The course also gives essential knowledge required for Laboratory Quality Managers to prepare laboratories for accreditation and audit as well as improving their skills on biorisk engagement procedures in the laboratories.

### COURSE CONTENT:

- Good laboratory practice (GLP)
- Effective leadership and personnel management principles
- Management requirements
- Technical requirements
- Laboratory Information Management Systems (LIMS)
- Equipment qualification
- Laboratory risk assessment
- Design and application of Laboratory Quality Manual
- Laboratory infrastructure and work place design
- General Biosafety Overview
- Occurrence management
- The 14 Core Biosafety Elements
- Dealing with hazards in the labs
- Proper Use and Maintenance of Biological Safety Cabinets
- Donning and Doffing Personal Protective Equipment
- Waste to wealth

**DURATION:** 7days  
**DATE:** 26<sup>th</sup> August -1<sup>st</sup> September, 2018  
**ARRIVAL:** 26<sup>th</sup> August, 2018  
**DEPARTURE:** 1st September, 2018  
**FEE:** ₦70,000.00

**VENUE:** Headquarters of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.



### 13. PRACTICAL TRAINING ON NITROGEN/PROTEIN DETERMINATION IN FOODS, FEEDS, SOIL AND PLANT SAMPLES

**FOR :** Laboratory Scientists, Laboratory Technologists, Food Scientists, Agronomists, Quality Control Managers, Research Scientists, Scientific officers, , Students in Tertiary Institutions and Research Institutions.

#### OBJECTIVES:-

This workshop is designed to expose and impart practical knowledge to participants on different methods of Nitrogen/Protein determination. Participants will also know how to develop internal check samples and generation of quality control charts for nitrogen/protein analysis.

#### COURSE CONTENT:

- Historical background of Nitrogen/Protein analysis
- Different digestion methods for Nitrogen/protein analysis
- Automated method of Nitrogen/Protein analysis
- Spectrophotometric method of Nitrogen/Protein analysis
- Standard preparations and equipment calibration
- Titrimetric method of Nitrogen/Protein analysis
- Development of internal check samples and quality control charts for Nitrogen/Protein analysis
- Data analysis and interpretation

**DURATION:** 7days  
**DATE:** 16<sup>th</sup> – 22<sup>nd</sup> September, 2018  
**ARRIVAL:** 16<sup>th</sup> September, 2018  
**DEPARTURE:** 22<sup>nd</sup> September, 2018  
**FEE:** ₦80, 000.00

**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.





## 14. WORKSHOP ON LABORATORY METHODS OF FOOD TOXINS AND AFLATOXIN ANALYSIS

**FOR :** Scientists, Technologists, Research Officers, Scientific officers, Project Managers , Students in Tertiary Institutions and Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVES:** The purpose of this workshop is to train the participants on methods for toxins detection e.g. (aflatoxin) using ELISA and PCR equipment. Basic Knowledge of ELISA and PCR will be advantageous for the participants

### COURSE CONTENT:

- Introduction to aflatoxin
- Sample and sampling methods
- Introduction to molecular detection of aflatoxin
- Culture, isolation and characterization of aflatoxigenic mould
- Calibration of related equipment and data interpretation
- Methods of aflatoxin analysis
- Principles and methods of ELISA
- Methods for estimation of aflatoxin
- Safety in aflatoxin analysis
- Microscopy
- Introduction to aflatoxin analysis using HPLC

**DURATION:** 7days  
**DATE:** 7<sup>th</sup> – 13<sup>th</sup> October, 2018  
**ARRIVAL:** 7<sup>th</sup> October, 2018  
**DEPARTURE:** 13<sup>th</sup> October, 2018  
**FEE:** ₦70, 000.00  
**VENUE:** Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats and laptops as the topic is fully practical oriented.



## GENERAL INFORMATION

### 1. VENUE

Most of the courses will be held at the NISLT Secretariat, Samonda, Ibadan, except otherwise indicated specifically at NISLT proposed headquarter in Abuja. In-house training of staff can be arranged for Institutions/Organizations on request. Interested Institutions/Organizations should contact the Registrar/CEO for further information.

### 2. ACCOMODATION

Participants will be responsible for their accommodation during the workshops. However, there are suitable hotels and guest houses with facilities which are affordable around the Institute. Arrangements for accommodation can be made on request to the Institute.

### 3. APPLICATIONS

Interested candidates, Institutions and Organizations should apply formally indicating their courses of interest to reach the Institute at least two weeks before the commencement date. Late applications or arrival for the respective workshops may not be entertained. Participants who wish to make payments in advance can pay online into the **TSA named Nigeria Institute of Science Laboratory Technology** in any of the commercial banks and present the teller during registration.

### 4. REQUIREMENTS

Since some of the training workshops involve laboratory sessions, participants are mandated to come with **LABORATORY COATS** in compliance with Laboratory Safety Regulations.  
*FOR APPLICATIONS, COMPLETE THE ATTACHED FORM AND FORWARD IT*

*TO:*

**The Registrar/CEO**

NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY

P.O.BOX 9764, U.I .POST OFFICE

SAMONDA, IBADAN, OYO STATE

TEL: 08062117814, 08030787747



**THE NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY (NISLT)  
CORPORATE NOMINATION FORM FOR 2018 SHORT-TERM TRAINING  
PROGRAMME**

Name of Organization:.....  
Address .....  
.....  
Telephone No.....  
Course/Workshop applied for .....

| Names of Nominees | Position in Establishment |
|-------------------|---------------------------|
| 1.                |                           |
| 2.                |                           |
| 3.                |                           |
| 4.                |                           |
| 5.                |                           |
| 6.                |                           |
| 7.                |                           |
| 8.                |                           |
| 9.                |                           |
| 10.               |                           |

Amount Enclosed .....

Name and Signature of Nominating Officer .....

.....





**THE NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY (NISLT)  
INDIVIDUAL APPLICATION FORM FOR 2017 SHORT-TERM TRAINING  
PROGRAMME**

I hereby apply to participate in the following course(s) of the Institute as advertised:

- (a) ..... Date .....
- (b) ..... Date .....
- (c) ..... Date .....

**PARTICULARS OF APPLICANT:**

NAME: .....

SEX: ..... MARITAL STATUS: .....

**ADDRESS & TELEPHONE NUMBER**

- (a) Residential: .....  
..... Tel: .....
- (b) Postal: .....  
.....
- (c) Office ..... Tel: .....
- (d) Home Town: ..... Tel: .....

**ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:**

.....  
.....

*Do you want the Institute to book accommodation for you? .....*

*If yes? Indicate below:*

*Ranges of hotel you want .....*

*The amount in bank draft that you are sending down as deposit*

*The course fees paid with receipt/bank teller: ₦.....*

**I hereby pledge to abide by all the rules and regulations governing the courses, which I have applied for.**

\_\_\_\_\_  
*Signature of Applicant*



NISLT 2018 SHORT TERM TRAINING PROGRAMMES



SUMMARY OF THE 2018 SHORT TERM TRAINING

| SN  | Courses   | Dates |     |   |   |   |   |   |     |     |     |     |     |
|-----|---|-------|-----|---|---|---|---|---|-----|-----|-----|-----|-----|
|     |   | Jan   | Feb | Mar                                       | Apr                                       | May                                       | Jun                                       | Jul                                       | Aug | Sep | Oct | Nov | Dec |
| 1.  | Basic Laboratory Techniques, Instrumentation, Methods And Safety For Laboratory Assistants And Attendants   |       |     | 25 <sup>th</sup><br>–<br>31 <sup>st</sup> |   |   |   |   |     |     |     |     |     |
| 2.  | Qualitative Research Methods And Scientific Research Paper Writing Workshop.  |       |     |   | 8 <sup>th</sup><br>–<br>14 <sup>th</sup>  |   |   |   |     |     |     |     |     |
| 3.  | Training Workshop On Promotion Of Safe Farming And Post-Harvest Activities (Processing, Food Storage And Consumption)   |       |     |   | 22 <sup>nd</sup><br>–<br>28 <sup>th</sup> |   |   |   |     |     |     |     |     |
| 4.  | Workshop On Qualitative And Quantitative Analysis Of Phytochemicals/Antinutrients And Antioxidant Activity.   |       |     |   | 29 <sup>th</sup> – 5 <sup>th</sup>        |   |   |   |     |     |     |     |     |
| 5.  | Workshop On Effective Laboratory Quality Management, Administration And Good Laboratory Practice  |       |     |   |   | 13 <sup>th</sup> -<br>9 <sup>th</sup>     |   |   |     |     |     |     |     |
| 6.  | Training On Cardiac Muscle, Cycle, Electrophysiology And Blood Pressure   |       |     |   |   | 20 <sup>th</sup><br>–<br>26 <sup>th</sup> |   |   |     |     |     |     |     |
| 7.  | Specialized Training Workshop On Science Equipment, Maintenance, Repair And Management Of Equipment Used In Chemical Laboratory                                   |       |     |   |   |   | 3 <sup>rd</sup><br>–<br>9 <sup>th</sup>   |   |     |     |     |     |     |
| 8.  | Training On Laboratory Documentation, Data Management And Reporting   |       |     |   |   |   | 17 <sup>th</sup><br>–<br>23 <sup>rd</sup> |   |     |     |     |     |     |
| 9.  | Advanced Training Course On Molecular Techniques/Biotechnology  |       |     |   |   |   |   | 8 <sup>th</sup><br>–<br>14 <sup>th</sup>  |     |     |     |     |     |
| 10. | Practical Training On Fiber And Fiber Fractions Analysis To Include Crude Fiber, Acid Detergent Fiber (Adf), Neutral Detergent Fiber (Ndf), Acid Detergent Lignin |       |     |   |   |   |   | 22 <sup>nd</sup><br>–<br>27 <sup>th</sup> |     |     |     |     |     |



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|     |   |  |  |  |  |  |  |   |  |  |  |  |
|-----|---|--|--|--|--|--|--|---|--|--|--|--|
|     | (Adl), Cellulose And Hemicellulose  |  |  |  |  |  |  |   |  |  |  |  |
| 11. | Practical Use Of Atomic Absorption Spectrophotometer (Aas) Flame Photometer And Ultra-Violet/Visible Spectrophotometer For Analysis |  |  |  |  |  |  | 5 <sup>th</sup> – 11 <sup>th</sup>            |  |  |  |  |
| 12. | Iso-17025 And Laboratory - Risk Engagement Programmes   |  |  |  |  |  |  | 26 <sup>th</sup> Aug. – 1 <sup>st</sup> Sept. |  |  |  |  |
| 13. | Practical Training On Nitrogen/Protein Determination In Foods, Feeds, Soil And Plant Samples  |  |  |  |  |  |  | 16 <sup>th</sup> – 22 <sup>nd</sup>           |  |  |  |  |